TITLE 2. ADMINISTRATION DIVISION 3. STATE PROPERTY OPERATIONS CHAPTER 1. STATE LANDS COMMISSION

Article 4.8. The Collection of Information Relating to Hull Husbandry Practices of Vessels for Control of Marine Invasive Species in Waters of California BIOFOULING MANAGEMENT TO MINIMIZE THE TRANSFER OF NONINDIGENOUS SPECIES FROM VESSELS ARRIVING AT CALIFORNIA PORTS

Section 2298. Hull Husbandry Reporting Form.

- (a) Section 71205(e) of the Public Resources Code requires the master, owner, operator, agent, or person in charge of a vessel carrying, or capable of carrying, ballast water into the coastal waters of the State to file the "Hull Husbandry Reporting Form" developed by the California State Lands Commission providing information regarding the hull husbandry practices relating to the vessel, within 60 days of receiving a written or electronic request from the Commission.
- (b) The "Hull Husbandry Reporting Form" (revised June 6, 2008) is hereby incorporated by reference and shall be used by the master, owner, operator, agent, or person in charge of a vessel carrying, or capable of carrying, ballast water into the coastal waters of the State to comply with the provisions of Section 71205(e) of the Public Resources Code.

Authority cited: Sections 71201.7, 71204.6, and 71205(e), Public Resources Code

Reference: Sections 71204.6, 71205(e) and 71205(f), Public Resources Code

Section 2298.1. Purpose, Applicability, and Date of Implementation.

- (a) The purpose of the regulations in Title 2, Division 3, Chapter 1, Article 4.8 of the California Code of Regulations is to move the State expeditiously toward elimination of the discharge of nonindigenous species into the waters of the State or into waters that may impact the waters of the State, based on the best available technology economically achievable.
- (b) The provisions of Article 4.8 apply to all vessels carrying, or capable of carrying, ballast water that arrive at a California port, except those vessels that are exempt under Section 71202 of the Public Resources Code or those vessels that satisfy the requirements of the emergency exemption clause in 2 CCR § 2298.9.1.
- (c) For the purposes of Article 4.8, all ports in the San Francisco Bay area East of the Golden Gate bridge, including the Ports of Stockton and Sacramento, shall be interpreted as the same "California port"; the Ports of Los Angeles, Long

Beach, and the El Segundo marine terminal shall be interpreted as the same "California port."

(d) The provisions of these regulations shall become effective July 1, 2017.

Authority Cited: Section 71201.7, Public Resources Code.

Reference Cited: Sections 71200, 71201, and 71202, Public Resources Code.

Section 2298.2. Definitions.

The following definitions shall govern the construction of this Article:

- (a) "Anti-fouling coating" means any paint or other coating that prevents or deters the attachment and growth of biofouling organisms on the wetted portions of a vessel. Anti-fouling coatings may include biocidal or non-biocidal anti-fouling coatings.
- (b) "Anti-fouling system" means a coating, paint, surface treatment, surface, or device that is used on a vessel to minimize or prevent attachment, growth, or association of biofouling.
- (c) "Biocidal anti-fouling coating" means an anti-fouling coating containing one or more chemical substances that are toxic or act as a deterrent to the settlement of living organisms.
- (d) "Biofouling," also referred to as hull fouling or marine growth, means the attachment or association of marine organisms to the wetted portions of a vessel or its appurtenances, including but not limited to sea chests, propellers, anchors and associated chains, and other niche areas. Biofouling includes microfouling and macrofouling.
- (e) "CCR" means the California Code of Regulations.
- (f) "Commission staff" means the staff of the California State Lands Commission.
- (g) "Division Chief" means the Chief of the Marine Environmental Protection Division of the California State Lands Commission or any employee of the Marine Environmental Protection Division authorized by the Division Chief to act on her or his behalf.
- (h) "Effective coating lifespan" means the expected age of an anti-fouling coating, as determined by the manufacturer and based on the vessel-specific application scheme (e.g. coating thickness) at the time of application, at which the coating is no longer expected to satisfactorily prevent or deter biofouling.

- (i) "Extended residency period" means remaining in one port consecutively for fortyfive days or longer.
- (j) "Foul-release coating" means a non-biocidal anti-fouling coating with surface properties that minimize the adhesion of biofouling organisms, resulting in organism detachment by vessel movement.
- (k) "Geographic location" means a port, anchorage, city and country, or latitude and longitude coordinates.
- (I) "In-water cleaning" means the physical removal of biofouling from the wetted portions of a vessel while the vessel remains in the water.
- (m) "In-water inspection" means underwater survey or inspection by diver(s) or with remotely operated vehicle(s). Inspections of a vessel's hull and other underwater surfaces for purposes other than surveying biofouling may be considered opportunities for evaluating the extent of biofouling.
- (n) "In-water treatment" means any method or process meant to kill or inactivate, but not remove, biofouling from the wetted portions of a vessel while the vessel remains in the water.
- (o) "Macrofouling" means biofouling of large, distinct multicellular organisms visible to the human eye such as barnacles, tubeworms, or fronds of algae.
- (p) "Marine Growth Prevention System" or "MGPS" means an anti-fouling system device used to reduce or prevent biofouling accumulation in internal seawater systems and sea chests. MGPS may include the use of anodes, injection systems, and electrolysis.
- (q) "Microfouling" means biofouling of microscopic organisms such as bacteria and single-celled algae and the slimy substances that they produce. Microfouling is commonly referred to as a slime layer or biofilm.
- (r) "Niche area" means an area on a vessel susceptible to biofouling due to variable hydrodynamic forces, susceptibility to coating system wear or damage, or inadequate protection by anti-fouling systems. Examples of niche areas include, but are not limited to, sea chests, bow thrusters, propeller shafts, inlet gratings, and out-of-water support strips.
- (s) "Non-biocidal anti-fouling coating" means an anti-fouling coating that does not rely on one or more chemical substances intended to be toxic or act as a deterrent to organism settlement in order to achieve its anti-fouling properties.

 Non-biocidal anti-fouling coatings may include foul-release coatings.

- (t) "Out-of-water maintenance" means removal of the vessel from the water and placement into a dry dock or slipway for inspection or maintenance. Out-of-water maintenance is commonly referred to as dry docking.
- (u) "Out-of-water support blocks" means support blocks placed underneath the vessel while the vessel is undergoing out-of-water maintenance in a dry dock or slipway.
- (v) "Out-of-water support strips" means sections of a vessel's hull that rest on out-of-water support blocks while the vessel is undergoing out-of-water maintenance in a dry dock or slipway. These areas are typically not cleaned or treated with fresh anti-fouling systems, resulting in reduced anti-fouling protection.
- (w) "Port" means any port or place in which a vessel was, is, or will be anchored or moored, or where a vessel will transfer cargo.
- (x) "Vessel" means a vessel of 300 gross registered tons (GRT) or more.
- (y) "Wetted portion of a vessel" means all parts of a vessel's hull and structures that are either submerged in water when the vessel is loaded to the deepest permissible draft or associated with internal piping structures in contact with water taken onboard.

Reference Cited: Sections 71200 and 71201, Public Resources Code.

Section 2298.3. Biofouling Management Plan.

- (a) The provisions described in this section apply to newly constructed vessels delivered into service on or after January 1, 2018, and to existing vessels beginning with completion of the first regularly scheduled out-of-water maintenance on or after January 1, 2018.
- (b) The master, owner, operator, or person in charge of a vessel carrying, or capable of carrying, ballast water that arrives at a California port shall maintain a Biofouling Management Plan to be retained onboard and prepared specifically for that vessel. Upon request, the plan shall be made available to Commission staff for inspection and review. This plan shall provide a description of the biofouling management strategy for the vessel that is sufficiently detailed to allow a master or other appropriate ship's officer or crew member serving on that vessel to understand and follow the biofouling management strategy. At a minimum, this plan shall:

- (1) Be regularly reviewed and revised to be current as of the last day of the most recent out-of-water maintenance or delivery if the vessel has never undergone out-of-water maintenance;
- (2) Maintain consistency with the components of the Biofouling Management
 Plan described in the International Maritime Organization's "Guidelines for
 the Control and Management of Ships' Biofouling to Minimize the Transfer
 of Invasive Aquatic Species (adopted on July 15, 2011)," hereby
 incorporated by reference; and
- (3) Describe the biofouling management practices and anti-fouling systems specifically used for the hull and each of the vessel's niche areas listed in 2 CCR § 2298.6(b)(1). For each anti-fouling system listed, include the following:
 - (A) Manufacturer name, model name, and product number, if applicable;
 - (B) Date each system was installed or applied;
 - (C) For anti-fouling coatings:
 - (1) Include the vessel's final specification document for the antifouling coating applied or a separate list documenting the
 information required by this subparagraph. The specification
 document or separate list shall include the parameters of the
 vessel's operating profile used for the specification of the
 anti-fouling system, including, at a minimum:
 - (a) The specified intended out-of-water maintenance or dry-docking interval of the vessel;
 - (b) The specified range of vessel operating speeds;
 - (c) The specified vessel activity level (e.g. percentage of time underway at sea compared with percentage of time berthed, anchored, moored, or adrift), if applicable;
 - (d) The specified vessel operating area or trading routes (e.g. coastal, deep-sea), if applicable.
 - (2) Specify the applied dry film thickness;
 - (3) Specify the manufacturer's expected effective coating lifespan (e.g. 60 months) at applied dry film thickness; and

(4) Include a copy of the vessel's International Anti-fouling
System Certificate used to comply with the International
Maritime Organization's Convention on the Control of
Harmful Anti-Fouling Systems on Ships (also known as AFS
Convention; entered into force on September 17, 2008), if
applicable.

(D) For Marine Growth Prevention Systems (MGPS):

- (1) Indicate where anodes or dosing outlets are installed (i.e. sea chest, strainer, or other location within seawater intake system); and
- (2) Specify manufacturer's recommended doses and dosage frequency, if applicable.
- (c) If a vessel does not have a Biofouling Management Plan consistent with subdivisions (a) and (b) of this section, and is arriving at a California port for the first time since the most recent regularly scheduled out-of-water maintenance or since delivery as a newly constructed vessel if no out-of-water maintenance has yet occurred, there shall be a 60-day grace period commencing on the date of arrival to enable the development of the required documents.

Authority Cited: Section 71201.7, Public Resources Code.

Reference Cited: Sections 71200, 71201, and 71205, Public Resources Code.

Section 2298.4. Biofouling Record Book.

- (a) The provisions described in this section apply to newly constructed vessels delivered into service on or after January 1, 2018, and to existing vessels beginning with completion of the first regularly scheduled out-of-water maintenance on or after January 1, 2018.
- (b) The master, owner, operator, or person in charge of a vessel carrying, or capable of carrying, ballast water that arrives at a California port shall maintain a Biofouling Record Book to be retained onboard the vessel. The Biofouling Record Book must contain details of all inspections and biofouling management measures undertaken on the vessel since the beginning of the most recent scheduled out-of-water maintenance or since delivery into service as a newly constructed vessel if no out-of-water maintenance has yet occurred. At a minimum, this record book shall:

- (1) Maintain consistency with the components of the Biofouling Record Book described in the International Maritime Organization's "Guidelines for the Control and Management of Ships' Biofouling to Minimize the Transfer of Invasive Aquatic Species" (adopted on July 15, 2011);
- (2) Include a description of all completed niche area management practices, as required in 2 CCR § 2298.6(b)(2).
- (c) If a vessel does not have a Biofouling Record Book consistent with the requirements of subdivisions (a) and (b) of this section and is arriving at a California port for the first time since the most recent regularly scheduled out-of-water maintenance or since delivery as a newly constructed vessel if no out-of-water maintenance has yet occurred, there shall be a 60-day grace period commencing on the date of arrival to enable the development of the required documents. During the 60-day grace period, the master, owner, operator, or person in charge of a vessel subject to this subdivision shall:
 - (1) Maintain records containing details of all inspections and biofouling management measures undertaken on the vessel since the beginning of the most recent regularly scheduled out-of-water maintenance or since delivery into service as a newly constructed vessel if no out-of-water maintenance has yet occurred; and
 - (2) Make the records described in 2 CCR § 2298.4(c)(1) available to Commission staff upon request.

Reference Cited: Section 71205, Public Resources Code.

Section 2298.5. Marine Invasive Species Program Annual Vessel Reporting Form.

The form "Marine Invasive Species Program Annual Vessel Reporting Form" (SLC 600.12, Revised 08/16) is hereby incorporated by reference. The master, owner, operator, agent or person in charge of a vessel carrying, or capable of carrying, ballast water that arrives at a California port shall submit the "Marine Invasive Species Program Annual Vessel Reporting Form" (SLC 600.12, Revised 08/16) to the Commission in written or electronic form at least twenty-four hours in advance of the first arrival of each calendar year at a California port of call.

Authority Cited: Section 71201.7, Public Resources Code.

Reference Cited: Sections 71204 and 71205, Public Resources Code.

Section 2298.6. Biofouling Management for Wetted Surfaces.

The provisions described in this section apply to newly constructed vessels delivered into service on or after January 1, 2018, and to existing vessels beginning with completion of the first regularly scheduled out-of-water maintenance on or after January 1, 2018.

- (a) The master, owner, operator, or person in charge of a vessel arriving at a

 California port shall manage biofouling on the wetted surfaces of the vessel,
 except those niche areas described in subdivision (b) of this section, in any of the following ways:
 - (1) If a vessel is using an anti-fouling coating, the coating shall not be aged beyond its effective coating lifespan, as documented in 2 CCR § 2298.3(b)(2)(C). If a vessel is using an anti-fouling coating and the coating is aged beyond its effective coating lifespan, as documented in 2 CCR § 2298.3(b)(2)(C), the master, owner, operator, or person in charge of a vessel shall document in the Biofouling Management Plan how biofouling on the wetted surfaces of the vessel, except those niche areas listed in subdivision (b)(1) of this section, shall be managed after the effective coating lifespan is exceeded. All biofouling management actions undertaken, and reports resulting from such actions, shall be documented in the Biofouling Record Book;
 - (2) If a vessel is not using an anti-fouling coating, the master, owner, operator, or person in charge of a vessel shall document in the Biofouling Management Plan how biofouling on the wetted surfaces of the vessel, except those niche areas listed in subdivision (b)(1) of this section, shall be managed in the absence of an anti-fouling coating. All biofouling management actions undertaken and reports resulting from such actions shall be documented in the Biofouling Record Book.
- (b) The master, owner, operator, or person in charge of a vessel arriving at a

 California port shall manage biofouling on the niche areas listed in subdivision
 (b)(1) of this section, if present, in a manner consistent with the requirements
 listed in subdivision (b)(2) of this section. Any other niche areas should also be
 managed in a manner consistent with subdivision (b)(2) of this section.
 - (1) Biofouling management shall apply to the following niche areas, if present:
 - (A) Sea chests;
 - (B) Sea chest gratings;
 - (C) Bow and stern thrusters;

- (D) Bow and stern thruster gratings;
- (E) Fin stabilizers and recesses;
- (F) Out-of-water support strips;
- (G) Propellers and propeller shafts; and
- (H) Rudders.
- (2) Biofouling in niche areas must be managed using one or more biofouling management practices that are appropriate for the vessel and its operational profile, as determined by the master, owner, operator, or person in charge of a vessel, and subject to the following conditions:
 - (A) All niche area management practices to be employed as part of the overall biofouling management strategy shall be listed in the Biofouling Management Plan, as required by 2 CCR § 2298.3(b)(2).
 - (B) All completed niche area management practices shall be documented in the Biofouling Record Book, as required by 2 CCR 2298.4(b)(2).
 - (C) If any of the niche area management practices listed in the

 Biofouling Management Plan are not conducted as planned, the
 reason(s) why the practice(s) were not conducted shall be
 documented in the Biofouling Record Book.

Reference Cited: Section 71205, Public Resources Code.

Section 2298.7. Requirements for Vessels with Extended Residency Periods.

The provisions described in this section apply to newly constructed vessels delivered into service on or after January 1, 2018, and to existing vessels beginning with completion of the first regularly scheduled out-of-water maintenance on or after January 1, 2018.

The master, owner, operator, or person in charge of a vessel that has had an extended residency period since its most recent out-of-water maintenance, in-water treatment, or in-water cleaning must ensure that the vessel is compliant with the following requirements upon arrival to a California port:

- (a) Manage biofouling in the niche areas listed in 2 CCR § 2298.6(b)(1), if present, in a manner that is consistent with the niche area management practices listed in the Biofouling Management Plan. All activities employed to manage biofouling in the niche areas described in 2 CCR § 2298.6(b)(1), if present, that accumulates as a result of the extended residency period shall be documented in the Biofouling Record Book.
- (b) Any activities, including in-water inspection, in-water cleaning, in-water treatment, or out-of-water maintenance, to manage biofouling on the wetted surfaces of the vessel, except those niche areas listed in 2 CCR § 2298.6 (b)(1), that accumulates as a result of the extended residency period shall be documented in the Biofouling Record Book.

Reference Cited: Section 71205, Public Resources Code.

Section 2298.8. Propeller Cleaning in California Waters.

Propeller cleaning in California waters is not prohibited under this article.

Authority Cited: Section 71201.7, Public Resources Code.

Reference Cited: Section 71201, Public Resources Code.

Section 2298.9. Alternatives.

- (a) Petitions for Alternatives.
 - (1) Any person subject to these regulations may submit a petition to the Division Chief for alternatives to the requirements of Article 4.8 as applied to the petitioner.
 - All petitions for alternatives must be submitted in writing. A petition may be in any written form, but it must contain all data and information necessary to evaluate its merits to fulfill the purposes of these regulations to move the State expeditiously toward elimination of the discharge of nonindigenous species into the waters of the State, or into waters that may impact the waters of the State, based on the best available technology economically achievable.
 - (3) All petitions for alternatives must be submitted and must receive approval prior to the vessel's arrival to a California port.

(b) Response to Petitions.

The Division Chief shall respond in writing to any petition for alternatives within thirty days of receipt of the petition.

- (c) Approval of Alternatives.
 - (1) The Division Chief may approve any proposed alternatives to the requirements of Article 4.8 if she or he determines that the proposed alternatives will fulfill the purpose of these regulations as outlined in 2 CCR § 2298.1(a).
 - (2) If the Division Chief approves any proposed alternatives under this section, a letter of approval shall be issued to the petitioner setting forth the findings upon which the approval is based.
 - (3) The Division Chief may withdraw the letter of approval of any alternative requirements at any time if he or she finds that the person or persons subject to these regulations have not complied with the approved alternative requirements.
 - (4) Withdrawal of a letter of approval under this section shall be effective upon receipt by the petitioner of written notification of the withdrawal from the Division Chief.

Authority Cited: Section 71201.7, Public Resources Code.

Reference Cited: Sections 71204 and 71205, Public Resources Code.

Section 2298.9.1. Emergency Exemptions.

A vessel will be exempt from the requirements contained within Article 4.8 if all of the following conditions are satisfied:

- (a) The vessel makes an unscheduled arrival to a California port because of an emergency, where the safety of the vessel or crew is compromised;
 - Arrival for the sole purpose of scheduled bunkering is not an emergency under this clause;
- (b) The master, owner, operator, agent, or person in charge of the vessel notifies the Division Chief, in written or electronic form, of the emergency, and provides details on the nature of the emergency, no later than twenty-four hours after the arrival and cessation of the emergency;

- (c) The vessel has not arrived to another California port since the most recent of the:
 - (1) <u>Previous out-of-water maintenance:</u>
 - (2) <u>Vessel's delivery into service; or</u>
 - (3) <u>Date when the vessel owner commenced ownership of the vessel.</u>
- (d) The vessel will remain in California waters for 21 days or less;

If the vessel remains in California waters for greater than 21 days, the Division Chief may require the master, owner, operator, or person in charge of a vessel to clean or treat the vessel to remove or inactivate macrofouling, using available in-water cleaning technologies, in-water treatment technologies, or out-of-water maintenance. The Division Chief will consider the biofouling extent, vessel port residency duration, and available in-water cleaning or treatment options when making this determination.

Authority Cited: Section 71201.7, Public Resources Code.

Reference Cited: Sections 71204 and 71205, Public Resources Code

Article 4.7. Performance Standards for the Discharge of Ballast Water for Vessels Operating in California Waters

Section 2297.1. Ballast Water Treatment Technology Reporting Requirements.

- (a) Ballast Water Treatment Technology Annual Reporting Form
 - (1) The following form "Ballast Water Treatment Technology Annual Reporting Form (Revised July 1, 2010)" is hereby incorporated by reference, and shall be used to comply with the provisions of Public Resources Code Section 71205(g) by the master, owner, operator, agent, or person in charge of a vessel that has a ballast water treatment system installed on board and has discharged treated ballast in waters of the state.
 - (2) The "Ballast Water Treatment Technology Annual Reporting Form" shall be submitted to the Commission in written or electronic form within 60 days of receiving a written or electronic request from the Commission.

- (b) Ballast Water Treatment Supplemental Reporting Form
 - (1) The following form "Ballast Water Treatment Supplemental Reporting Form (Revised July 1, 2010)" is hereby incorporated by reference, and shall be used to comply with the provisions of Public Resources Code Section 71205(g) by the master, owner, operator, agent, or person in charge of a vessel that has a ballast water treatment system installed on board and has discharged treated ballast in waters of the state.
 - (2) The "Ballast Water Treatment Supplemental Reporting Form" shall be submitted to the Commission in written or electronic form upon departure of that vessel from a California port or place of call if that vessel discharged treated ballast water into the waters of the state.

Authority cited: Sections 71201.7 and 71205, Public Resources Code.

Reference: Sections 71201.7 and 71205(g), Public Resources Code.